



## The Impact of Multiple Intelligences on Teaching Competency and Self-Efficacy in B.Ed. Trainees: A Study in the Indian Context

Subhamol V R, Research Scholar in Education, VISTAS, Chennai.  
Dr. S.Shobhana, Assistant Professor in Education, VISTAS, Chennai.

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### Abstract

This research investigates the influence of multiple intelligences on teaching competency, and self-efficacy among B.Ed. trainees in the Indian educational context. Using Gardner's theory as a framework, this research explores the interplay between various intelligence types, and their impact on the professional skills of future educators. A mixed-methods approach was adopted, involving surveys, interviews, and observational data. The findings reveal a significant correlation between specific intelligences, such as interpersonal, and intrapersonal skills, and enhanced teaching performance. Implications for curriculum design, and teacher training programs are discussed.

**Keywords:** - Multiple Intelligences, Teaching Competency, Self-Efficacy, B.Ed. Trainees, Classroom management.

## I. INTRODUCTION

India is adapting its educational system to the needs of the twenty-first century. Programs for training teachers, like the Bachelor of Education (B.Ed.), are essential to producing qualified teachers. But conventional methods of training teachers, frequently ignore the range of learner's emotional, and cognitive abilities.

A thorough foundation for comprehending these abilities is provided by Howard Gardner's idea of multiple intelligences. This study aims to assess the role of multiple intelligences in enhancing teaching competency, and self-efficacy among B.Ed. trainees. Specifically, it explores how different intelligences such as linguistic, interpersonal, and kinesthetics, affect the ability to engage, and educate students effectively.

## II. RESEARCH PROBLEM

There has been growing doubt about the efficacy of traditional teaching methods in the context of teacher preparation programs. Despite the increasing awareness of student's varied cognitive, and emotional talents, the majority of B.Ed. programs in India still emphasize broad pedagogical knowledge over taking use of individual intelligence differences. The notion of multiple intelligences (MI), put out by Howard Gardner, highlights the identification of diverse intellectual capacities that support efficient teaching, and learning. Research on the connection between teaching proficiency, self-efficacy, and multiple intelligences among Indian B.Ed. candidates is, however, scarce.

This study seeks to address this gap by investigating how multiple intelligences influence the teaching competency, and self-efficacy of B.Ed. trainees. Specifically, it aims to determine whether certain intelligences such as interpersonal, linguistic, and intrapersonal, are linked to enhanced teaching skills, confidence in teaching, and overall professional development. Comprehending these connections may result in more customized, and efficient teacher preparation programs that acknowledge, and foster the variety of skills possessed by aspiring teachers.

### III. RESEARCH GAP

Although a lot of study has been done on Gardner's multiple intelligences (MI) theory in relation to student learning, little of it has been done on how MI theory is applied in teacher preparation programs, especially in India. Little focus has been placed on how multiple intelligences (MI) affect teaching competency, and self-efficacy in teacher candidates, most of the existing material looks at how MI affects student learning outcomes.

Furthermore, in the Indian context, teacher training programs like the Bachelor of Education (B.Ed.) often follow traditional pedagogical methods that do not fully incorporate MI theory to cater to the diverse intellectual strengths of trainees.

Studies examining the relationship between specific types of intelligences (e.g., interpersonal, linguistic, intrapersonal), and the professional development of B.Ed. trainees are sparse. It is not addressed in the existing studies, how these intelligences might help teachers become more competent, self-assured, and effective in the classroom. Additionally, the inclusion of MI theory in Indian teacher education curricula, which could result in more individualized, and efficient training approaches, is not supported by empirical data.

In order to close these gaps, and provide a more nuanced knowledge of how to improve teacher preparation programs, this study will investigate how various intelligences shape the teaching competency, and self-efficacy of B.Ed. trainees in India.

### IV. OBJECTIVES OF THE STUDY

- To evaluate how teaching ability among Indian B.Ed. candidates relates to various forms of multiple intelligences (linguistic, interpersonal, intrapersonal, etc.).
- To examine how multiple intelligences, influence the self-efficacy of B.Ed. trainees in their teaching practices.
- To investigate how classroom management, communication abilities, and general teaching efficacy are affected by interpersonal, and intrapersonal intelligences.
- To ascertain whether particular intelligences such verbal, and kinesthetic, help students develop practical teaching abilities like lesson planning, student participation, and flexibility.
- To detect any possible issues with the integration of different intelligences in the current B.Ed. curriculum, and suggest changes in light of the study's conclusions.
- To add empirical data regarding the effect of multiple intelligences in improving future teacher's teaching competency, and self-efficacy to the body of research on teacher preparation programs.

### V. SIGNIFICANCE OF THE STUDY

In the theoretical, and practical contexts of teacher education, this study is quite valuable. It aims to bridge critical gaps in existing research by exploring the role of multiple intelligences (MI) in enhancing teaching competency, and self-efficacy among B.Ed. trainees in India. The findings will offer several contributions:

#### 5.1. Theoretical Contribution

With a focus on India, the study will broaden the use of Gardner's Multiple Intelligences hypothesis in teacher education. Through an analysis of the relationship between various intelligences, and teaching competency, and self-efficacy, this study will shed light on the ways in which cognitive, and emotional strengths impact the success of instruction.

#### 5.2. Practical Contribution

Redesigning teacher training courses to better accommodate a range of intellectual abilities can be guided by the study's findings. In order to provide more individualized, efficient, and comprehensive teacher education programs, it will emphasize the significance of identifying, and fostering different intelligences. Future teacher's confidence, instructional abilities, and general influence in the classroom can all be improved as a result, furthering their professional development.

#### 5.3. Policy Implications

The results of this study could help educational officials understand why teacher training programs should incorporate MI-based practices. This could result in the development of more inclusive, adaptable teaching frameworks, that prepare teachers to handle diverse classroom settings, and diverse student needs.

#### 5.4. Enhancing Teacher Self-Efficacy

By identifying the role of self-efficacy in teaching, the study will emphasize how enhancing a teacher's belief in their ability to succeed influences their classroom performance, and student outcomes. This can lead to interventions aimed at boosting teacher confidence through tailored MI-based activities.

#### 5.5. Contribution to Future Research

Particularly in various cultural contexts, the study will lay the groundwork for future investigations into the relationship between teaching competency and multiple intelligences. Future research on incorporating MI theory into instructional strategies at various educational levels will also use it as a guide.

### VI. HYPOTHESIS OF THE STUDY

- Null Hypothesis ( $H_0$ ):  
Teaching proficiency among B.Ed. candidates, and multiple intelligences do not significantly correlate.
- Alternative Hypothesis ( $H_1$ ):  
Multiple intelligences, and teaching proficiency among B.Ed. candidates are significantly correlated.

- Ho: Multiple intelligences do not significantly influence the self-efficacy of B.Ed. trainees.
- H<sub>1</sub>: Multiple intelligences significantly influence the self-efficacy of B.Ed. trainees.
- Ho: Based on the prominent types of multiple intelligences, there is no discernible difference in the teaching competency of B.Ed. candidates.
- H<sub>1</sub>: The prevalent categories of multiple intelligences among B.Ed. candidates indicate a substantial variation in their teaching abilities.
- Ho: Interpersonal, and intrapersonal intelligences do not significantly impact classroom management, and communication skills of B.Ed. trainees.
- H<sub>1</sub>: Interpersonal, and intrapersonal intelligences significantly impact classroom management, and communication skills of B.Ed. trainees.

## VII. LITERATURE REVIEW

In educational research, the multiple intelligences idea has been used extensively, since its inception in the 1980s. According to studies, learning outcomes are enhanced, when instructional tactics are modified to correspond with student's dominant intelligences. Research on this theory's applicability to Indian teacher training programs is, nevertheless, scarce.

Although many B.Ed. curricula do not include activities that foster these abilities, key findings from prior research show that intrapersonal intelligence helps with self-reflection, and adaptability, while interpersonal intelligence is essential for classroom management. This study fills this gap by investigating the relationship between multiple intelligences, and teaching competency in an Indian context.

## VIII. METHODOLOGY

This study employed a mixed-methods design that combined qualitative, and quantitative techniques.

### 8.1. Participants

Two hundred B.Ed. students from ten colleges in Kerala's Palakkad area made up the sample. Stratified random sampling was used to choose participants in order to guarantee variety in terms of age, gender, and educational background.

### 8.2. Data Collection

- Survey: A standardized questionnaire assessed participant's multiple intelligences, and self-efficacy levels.
- Interviews: Semi-structured interviews shed light on trainee's perceptions of their teaching proficiency in connection to their dominant intelligences.
- Classroom Observation: Teaching sessions were observed to evaluate practical applications of multiple intelligences.

### 8.3. Data analysis

To ascertain the associations between variables, quantitative data were analyzed using regression, and correlation approaches. Qualitative data were coded, and thematically analysed to identify recurring patterns, and themes.

## IX. RESULTS

- Correlation Analysis: Interpersonal intelligence showed the strongest positive correlation with teaching competency ( $r = 0.78, p < 0.01$ ). Intrapersonal intelligence also demonstrated a significant, but moderate correlation ( $r = 0.65, p < 0.05$ ).
- Regression Analysis: Multiple intelligences collectively explained 62% of the variance in teaching competency.
- Qualitative Findings: Trainees with high linguistic intelligence reported better communication skills, while those with high kinesthetic's intelligence excelled in activity-based teaching methods.

## X. DISCUSSION

These results highlight how crucial it is to include many intelligences in teacher preparation courses. For example, establishing rapport with kids, and overseeing diverse classrooms require interpersonal intelligence. In a similar vein, teachers can reflect on, and enhance their teaching methods thanks to intrapersonal intelligence, which cultivates self-awareness.

The findings demonstrate the need for a more individualized approach to teacher preparation, and are consistent with Gardner's theory, and other research.

## XI. CONCLUSION

This study shows how teaching competency, and self-efficacy among B.Ed. candidates are greatly influenced by multiple intelligences. Teacher preparation programs can create more capable, and flexible teachers by identifying, and fostering these intelligences.

### 11.1. Recommendations

- Integrate multiple intelligences into B.Ed. curricula through targeted activities, and assessments.
- Provide professional development workshops to help trainers identify, and foster trainee's unique intelligences.
- Conduct longitudinal studies to examine the long-term impact of multiple intelligences on teaching performance.

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